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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,762	01/26/2004	Thomas J. Moravec	110000-9449	8780

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INSKEEP INTELLECTUAL PROPERTY GROUP, INC
2281 W. 190TH STREET
SUITE 200
TORRANCE, CA 90504

EXAMINER

NILAND, PATRICK DENNIS

ART UNIT	PAPER NUMBER
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1714

MAIL DATE	DELIVERY MODE
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05/17/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/764,762

Applicant(s)

MORAVEC ET AL.

Examiner

Patrick D. Niland

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/2/07.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/2/07 has been entered.

The amendment of 3/2/07 has been entered. Claims 1-6 and 8 are pending.

2. Claims 1-6 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. The term "thin" in claim 1 is a relative term which renders the claim indefinite. The term "thin" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is unclear what specifically is intended by "thin" and how or if "thin" distinguishes over the prior art cited.

B. Considering the applicant's arguments regarding "substrate sheet" of the instant claims and the lack of definition thereof in the instant specification, it is unclear what the scope of "substrate sheet" of the instant claims is intended to be. It is unclear how or if it distinguishes over "layer" previously claimed.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 1-6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat. Application Pub. No. 2004/0207809 Blackburn et al. in view of US Pat. No. 6113813 Goudjil, US Pat. No. 4962013 Tateoka et al., US Pat. No. 5449558 Hasegawa et al., and US Pat. No. 6309313 Peter.

Blackburn discloses photochromic coatings of polyurethane (section [0023] and [0048]-0052]), the instantly claimed amount of photochromic compound (section [0060]), the instantly claimed thickness (section [0063]), and hindered amine light stabilizers and phenolic antioxidants (section [0088]). UV absorbers are not required of the compositions though they are optionally used. The layers of sections [0022], [0024], and [0025] fall within the scope of the laminate film and “being sandwiched between an inner and outer protective layer of the instant claims. The layer of polyurethane of section [0023] and the other sections noted herein regarding polyurethane photochromic layers are “films” per se. A coating is a film.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the stabilizer mixtures of Goudjil, which fall within the scope of the HALS of the instant claim 3, in the films of Blackburn discussed above because the combinations of HALS and antioxidants encompassed therein are encompassed by Blackburn and would have been expected to give the combinations of benefits taught by Goudjil and Blackburn. See Goudjil, column 5, lines 16-45 and 66-67; column 6, lines 10-26; column 3, lines 59-62; column 4, lines 18-30; and the remainder of the document. The stabilizer mixtures of Goudjil are expected to prevent polyurethanes from yellowing as taught by Peter, column 10, lines 52-59. It would have been obvious to one of ordinary skill in the art at the time of the instant invention to choose the polyurethane forming monomers of the polyurethanes of Blackburn so as to

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minimize yellowing as taught throughout Hasegawa, particularly column 4, lines 48-56, because the users of such products dislike discoloration in them, as evidenced by Hasegawa's teaching to use non-yellowing polyurethanes, for various reasons well known to the ordinary skilled artisan.

Reaction injection molding (RIM as is well known and often used in the polyurethane injection molding arts) of the patentee's urethane monomers, which are typically liquids at room temperature, as the injection molding technique of Goudjil would require little or no outside heating, as is extremely well known. Cell casting is not seen to require the argued thermal initiators where urethane monomers of claim 1 of the patentee are used. These initiators are clearly required of the acrylics discussed as non-limiting examples of the resin throughout the patent but they are not required of the well known urethane chemistry. The isocyanate and polyol, i.e. urethane monomers, will react without such initiator or heating. Furthermore, the applicant provides no probative evidence of the applicant's representative's assertions regarding heat degradation. There is no showing that the instantly claimed b^* limitation is not met with some heating. Language such as "some circumstances" and "likely" indicate that the applicant's argument does not always apply. It is not stated how much heat is required to cause degradation which gives a b^* outside the instant claims nor how much degradation is required to cause b^* to be outside the instant claims nor that the patentee's polyurethanes would be outside the instantly claimed b^* value where it is cell cast. The patentee does not mention b^* per se and therefore cannot teach away from the instantly claimed b^* limitation. These arguments are therefore not persuasive. Furthermore, Goudjil is not cited for the means to put the compounds in the polymer matrix and the methods of shaping the polymer composition. It is cited for the combination of stabilizers and their benefits.

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It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the instantly claimed antioxidant of claim 3 as the antioxidant of Blackburn because it is encompassed by the broad language of Blackburn and Tateoka shows it to be known for use as an antioxidant in similar photochromic films at column 21, structure D-27 and column 27, lines 20-37 and the remainder of the document and it would have been expected to contribute its antioxidant properties to the film of Blackburn.

The instant claims recite no degree of curing, no mechanism of curing, no molecular weight resulting from curing, nor any other means to distinguish the polymer of the prior art from the newly recited "cured" polymer. It is the examiner's position that the reaction that made the polyurethane film layer of the prior art falls within the nebulous scope of "cured" of the instant claims. "Cast" is a process step that is not seen as distinguishing the film of the instant claims from the film of the prior art. It would appear that the film of the prior art would be the same as or an obvious variant of the newly claimed "cast" film. See MPEP When the reference teaches a product that appears to be the same as, or an obvious variant of, the product set forth in a product-by-process claim although produced by a different process. See *In re Marosi*, 710 F.2d 799, 218 USPQ 289 (Fed. Cir. 1983) and *In re Thorpe*, 777 F.2d 695, 227 USPQ 964 (Fed. Cir. 1985). See also MPEP § 2113 regarding product by process limitations.

"Thin" of the instant claims is a relative term which is undefined specifically. It is the examiner's position that the "substrate sheets" of the instant claims are the "layers" previously claimed and described by the prior art. It is the examiner's position that the layers of the prior art falling within the new recitation of thin substrate sheets fall within the scope of the relative term thin by the nature of the articles discussed above, which are necessarily thin relative to some

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degree of thickness. "Protective" is necessarily met by surrounding films such as those discussed above because layers encasing other layers will necessarily "protect" the covered film surfaces from something as is readily apparent to the ordinary skilled artisan on its face.

Applicant's argument that the prior art does not describe thin substrates as compared to the other layers and the layers of paragraphs [0024] and [0025] are not substrate sheets at all let alone thing substrate sheets as claimed is not persuasive as the instant claims do not require thinness relative to the other layers nor is any distinction between the prior art "sheets" seen from the newly recited language "substrate sheet" which is taken as encompassing the prior claimed "layer". The applicant fails to point out any structurally distinguishing feature required by "substrate sheet" not possessed by the layers of the cited prior art. The examiner fails to see that a "film coating" is not a "sheet" of polymer which is a "substrate sheet". The instant claims do not require creating "a resin substrate sheet that is later used as either an inner or outer layer in a laminate. The instant claims are directed to the final laminate. Note the product by process arguments above in this regard also. It is specifically not seen that the newly recited "substrate sheet" language distinguishes over the layers of the prior art. In other words the final product of the instant claims is not seen as being distinguishable from that discussed above based on "substrate sheet" even if the applicant's argued definition of substrate sheet is accepted. The examiner continues to have the position that "substrate sheet" encompasses the layers of the prior art. Goudjil is cited only for stabilizer mixtures above. It is not seen what aspect discussed above the applicant's representative cannot find specifically. The quotation argued does not appear in this rejection. The columns and lines are specified. The applicant's attack on the individual references does not address the above rejection which is the combination of the

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references, not their individual teachings, as is clearly stated above. In other words, it has not been shown by the applicant that it would not have been obvious to modify the primary reference as stated in the above rejection by the teachings of the secondary references for the reasons stated above. This rejection is therefore maintained.

5. Claims 1-6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat. No. 6113813 Goudjil in view of US Pat. No. 4962013 Tateoka et al. and US Pat. Application Pub. No US 2004/0207809 Blackburn et al..

Goudjil discloses the instantly claimed films, including polyurethanes having the instantly claimed stabilizers and photochromic compound at the abstract; column 2, lines 60-67; column 3, lines 1-22 and 59-62; column 4, lines 1-30 and 58; column 5, lines 15-45, which encompasses the instantly claimed stabilizer mixtures, and 66-67 which encompasses the instantly claimed amount of photochromic compounds; column 6, lines 1-26; column 7, lines 50-58; column 8, lines 1-56, particularly line 2; and the remainder of the document. Since the patentee uses the instantly claimed stabilizer combinations, his films must necessarily and inherently possess the instantly claimed improvement in light fatigue and change in b^* . The additional "thin" "substrate sheets are not disclosed by Goudjil".

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the instantly claimed combinations of ingredients encompassed by Goudjil in the films of Goudjil because they are disclosed by the patentee and would have been expected to give the properties disclosed by the patentee.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the instantly claimed antioxidant of claim 3 as the antioxidant of Goudjil

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because it is encompassed by the broad language of Goudjil and Tateoka shows it to be known for use as an antioxidant in similar photochromic films at column 21, structure D-27 and column 27, lines 20-37 and the remainder of the document and it would have been expected to contribute its antioxidant properties to the film of Goudjil.

Reaction injection molding (RIM as is well known and often used in the polyurethane injection molding arts) of the patentee's urethane monomers, which are typically liquids at room temperature, as the injection molding technique of Goudjil would require little or no outside heating, as is extremely well known. Cell casting is not seen to require the argued thermal initiators where urethane monomers of claim 1 of the patentee are used. These initiators are clearly required of the acrylics discussed as non-limiting examples of the resin throughout the patent but they are not required of the well known urethane chemistry. The isocyanate and polyol, i.e. urethane monomers, will react without such initiator or heating. Furthermore, the applicant provides no probative evidence of the applicant's representative's assertions regarding heat degradation. There is no showing that the instantly claimed b^* limitation is not met with some heating. Language such as "some circumstances" and "likely" indicate that the applicant's argument does not always apply. It is not stated how much heat is required to cause degradation which gives a b^* outside the instant claims nor how much degradation is required to cause b^* to be outside the instant claims nor that the patentee's polyurethanes would be outside the instantly claimed b^* value where it is cell cast. The patentee does not mention b^* per se and therefore cannot teach away from the instantly claimed b^* limitation. These arguments are therefore not persuasive.

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It would have been obvious to one of ordinary skill in the art at the time of the instant invention to sandwich the photochromic compound of Goudjil between two protective layers according to the instant claims because it is well known to protect soft plastics such as those of Goudjil from scratching by protecting them with hard layers on both sides of the soft plastic, as taught by Balckburn et al., sections [0021]-[0025], particularly section [0025]. The layers of sections [0022], [0024], and [0025] fall within the scope of the laminate film and “being sandwiched between an inner and outer protective layer of the instant claims. The layer of polyurethane of section [0023] and the other sections noted herein regarding polyurethane photochromic layers are “films” per se. A coating is a film. The cited prior art does not require a UV absorber.

The instant claims recite no degree of curing, no mechanism of curing, no molecular weight resulting from curing, nor any other means to distinguish the polymer of the prior art from the newly recited “cured” polymer. It is the examiner’s position that the reaction that made the polyurethane film layer of the prior art falls within the nebulous scope of “cured” of the instant claims. “Cast” is a process step that is not seen as distinguishing the film of the instant claims from the film of the prior art. It would appear that the film of the prior art would be the same as or an obvious variant of the newly claimed “cast” film. See MPEP When the reference teaches a product that appears to be the same as, or an obvious variant of, the product set forth in a product-by-process claim although produced by a different process. See *In re Marosi*, 710 F.2d 799, 218 USPQ 289 (Fed. Cir. 1983) and *In re Thorpe*, 777 F.2d 695, 227 USPQ 964 (Fed. Cir. 1985). See also MPEP § 2113 regarding product by process limitations.

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“Thin” of the instant claims is a relative term which is undefined specifically. It is the examiner’s position that the “substrate sheets” of the instant claims are the “layers” previously claimed and described by the prior art. It is the examiner’s position that the layers of the prior art falling within the new recitation of thin substrate sheets fall within the scope of the relative term thin by the nature of the articles discussed above, which are necessarily thin relative to some degree of thickness. “Protective” is necessarily met by surrounding films such as those discussed above because layers encasing other layers will necessarily “protect” the covered film surfaces from something as is readily apparent to the ordinary skilled artisan on its face.

Applicant’s argument that the prior art does not describe thin substrates as compared to the other layers and the layers of paragraphs [0024] and [0025] are not substrate sheets at all let alone thing substrate sheets as claimed is not persuasive as the instant claims do not require thinness relative to the other layers nor is any distinction between the prior art “sheets” seen from the newly recited language “substrate sheet” which is taken as encompassing the prior claimed “layer”. The applicant fails to point out any structurally distinguishing feature required by “substrate sheet” not possessed by the layers of the cited prior art. The examiner fails to see that a “film coating” is not a “sheet” of polymer which is a “substrate sheet”. The instant claims do not require creating “a resin substrate sheet that is later used as either an inner or outer layer in a laminate. The instant claims are directed to the final laminate. Note the product by process arguments above in this regard also. It is specifically not seen that the newly recited “substrate sheet” language distinguishes over the layers of the prior art. In other words the final product of the instant claims is not seen as being distinguishable from that discussed above based on “substrate sheet” even if the applicant’s argued definition of substrate sheet is accepted. The

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examiner continues to have the position that "substrate sheet" encompasses the layers of the prior art. Goudjil does not disclose the laminates previously stated, as argued by the applicant in their reference to the quotation argued. The above rejection has been corrected in this regard and had previously stated the obviousness of using the claimed protective layers. The applicant's attack on the individual references does not address the above rejection which is the combination of the references, not their individual teachings, as is clearly stated above. In other words, it has not been shown by the applicant that it would not have been obvious to modify the primary reference as stated in the above rejection by the teachings of the secondary references for the reasons stated above. This rejection is therefore maintained.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick D. Niland whose telephone number is 571-272-1121. The examiner can normally be reached on Monday to Thursday from 10 to 5.

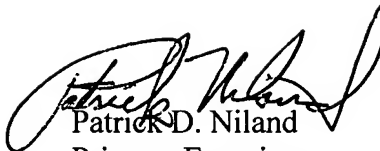
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to read "Patrick D. Niland". The signature is stylized with a large, looping initial "P" and a long, sweeping underline.

Patrick D. Niland
Primary Examiner
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